

Name: \_\_\_\_\_

Date: \_\_\_\_\_

### Check if Relation is a Function (12 pts classwork, version 9)

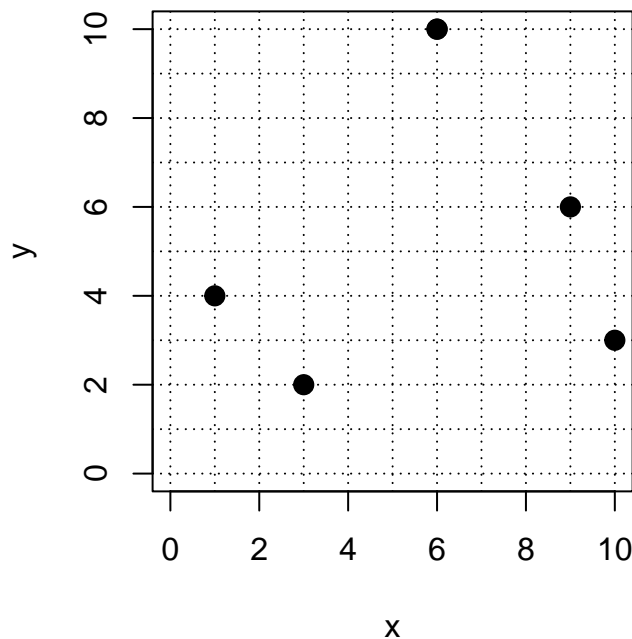
1. A **relation** is expressed as a list of  $(x, y)$  ordered pairs.

$(8, 3)$   $(3, 9)$   $(3, 6)$   $(5, 9)$   $(2, 1)$   $(5, 5)$

- Is this list consistent with  $y$  being a function of  $x$ ? Why or why not?
- Is this list consistent with  $x$  being a function of  $y$ ? Why or why not?
- Is this list consistent with a one-to-one function? Why or why not?

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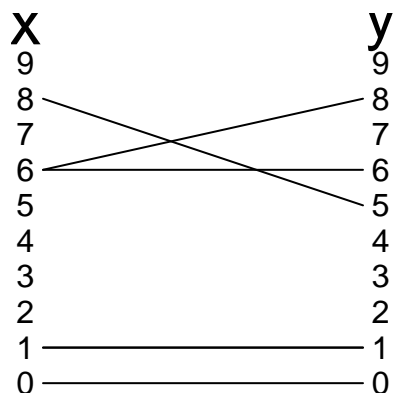
2. A relation is shown as points on a graph.



- Is this relation consistent with  $y$  being a function of  $x$ ? Why or why not?
- Is this relation consistent with  $x$  being a function of  $y$ ? Why or why not?
- Is this relation consistent with a one-to-one function? Why or why not?

### Check if Relation is a Function (version 9)

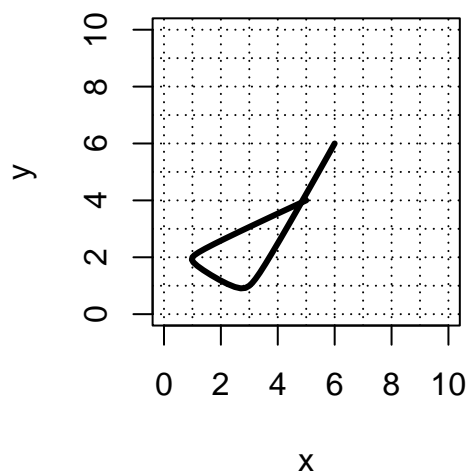
3. A relation is shown with segments connecting elements of two sets.



- Is this relation consistent with  $y$  being a function of  $x$ ? Why or why not?
- Is this relation consistent with  $x$  being a function of  $y$ ? Why or why not?
- Is this relation consistent with a one-to-one function? Why or why not?

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4. A relation is shown as a curve plotted on an  $x, y$



- Is this relation consistent with  $y$  being a function of  $x$ ? Why or why not?
- Is this relation consistent with  $x$  being a function of  $y$ ? Why or why not?
- Is this relation consistent with a one-to-one function? Why or why not?